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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,059	06/02/2005	Ryuichi Suzuki	4605-051683	8385

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EXAMINER

KHAN, AMINA S

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,059	Applicant(s) SUZUKI, RYUICHI	
	Examiner AMINA KHAN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-17, 19, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) 18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/25/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on December 28, 2004. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Specification

2. The abstract of the disclosure is objected to because it needs grammatical correction. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 18 and 20 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must be written in a format recited in MPEP 608.01(n) section A. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-17,19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Huff et al. (US 4,508,684).

Huff et al. teach a glass silicated consisting of SiO_2 and Na_2O fused together by heating to 2500°F in a platinum crucible for 25 minutes, which meets the claimed limitation of firing (column 5, lines 20-68). Huff et al. further teach adding the fused silicate to an aqueous solution, which meets the claimed limitation of modified water, comprising ethylene glycol, which meets the claimed limitation of antifreeze, at concentrations of at least 45% by volume of the solution (column 6, lines 5-25).

Accordingly, the teachings of Huff et al. are sufficient to anticipate the material limitations of the instant claims.

6. Claims 10-12 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Shunsaku (JP 07-016560).

Shunsaku teaches baking diatomaceous earth comprising the instantly claimed oxides and treating water with the baked substance (abstract; page 1, paragraph 0007; page 3 paragraphs 0012-0021).

Accordingly, the teachings of Shunsaku are sufficient to anticipate the material limitations of the instant claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groth (US 6,824,877).

Groth teaches clays of the composition cited in TABLE IB (column 6). Groth further teaches that the SiO₂ concentration may be adjusted to 50% (column 3, lines 1-15).

Groth does not teach all the instantly claimed embodiments in a single example.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the substances of Goth by incorporating 50% of SiO₂ because Goth teaches this concentration as efficient for providing clay compositions suitable for artistic works.

Even though Groth does not teach a water modifier use of his composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

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9. Claims 1-17,19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuaki (JP 2004-346765).

Kazuaki teaches natural rock comprising the instantly claimed oxide, baked at 1200°C and added to engine cooling water (8000 cc) comprising ethylene glycol (page 2, paragraphs 0025-0031).

Kazuaki does not teach the instantly claimed concentration of ethylene glycol.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the glycol concentration to that instantly claimed for the optimization of the cooling and antifreeze properties of the fluid.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMINA KHAN whose telephone number is (571)272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796

/Amina Khan/
Examiner, Art Unit 1796
March 31, 2008